

List of All Chemicals

P Phellodendron amurense (Rutaceae)

Common name(s)

Amur Cork Tree; Huang Bai; Po Mu; Huang Po

How used

Medicinal

*Unless otherwise noted all references are to Duke, James A. 1992. Handbook of phytochemical constituents of GRAS herbs and other economic plants. Boca Raton, FL. CRC Press.

Chemical	Part All ▾	Low PPM	High PPM	StdDev	*Reference
7-DEHYDROSTIGMASTEROL	Bark	--	--		*
AMURENSINE	Leaf	400.0	10000.0		*
Activities (3)					
Analgesic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.				
Expectorant	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.				
Tranquilizer	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.				
BERBERINE	Bark	8300.0	10000.0	-1.0	*
Activities (130)					
(+)-Inotropic	Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livingston, Edinburgh.				
Abortifacient					
Adrenolytic	Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livingston, Edinburgh.				
Amebicide 200 ug/ml	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).				
Amebicide EC83=100 ug/ml orl rat	Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livingston, Edinburgh.				
Analgesic					
Anesthetic					
Antiacyetylcholinesterase					
Antiacne	Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livingston, Edinburgh.				
Antidiadrenergic	Huang, K. C. 1993. The Pharmacology of Chinese Herbs. CRC Press, Boca Raton, FL 388 pp.				
Antiaggregant					
Antialzheimeran					
Antiamnesic	Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livingston, Edinburgh.				
Antiangiogenic					
Antiarrhythmic					
Antiarthritic					
Antibacillus MIC=200 ug/ml					
Antibacterial 100 mg/4x/day					
Antibacterial 12.5-2,500 ug/ml	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).				
Antibacterial MIC=6-630 ug/ml					
Antibiotic	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).				
Anticancer					
Anticariogenic	Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livingston, Edinburgh.				
Antichlamydial					
Anticholecytistic 5-20 mg/3x/day/orl	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).				
Anticholera 150 mg/man/day	Martindale's 28th				
Anticirrhotic	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).				
Anticonjunctivitic 0.20%	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).				
Anticonvulsant	Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.				
Antidiarrheic 100 mg/4x/day					
Antidisenteric 100 mg/4x/day					
Antiedemic	Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livingston, Edinburgh.				
Antiendotoxic	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.				
Antienterotoxic	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).				

Antiesherichic	
Antigiardial 10 mg/kg/day	
Antiglaucomic	
Antigonorrhea	
Antihepatomict	Mills, Simon and Bone, Kerry. 2000. <i>Phytotherapy</i> . Churchill Livingston, Edinburgh.
Antihepatotic	
Antiherpetic	
Antihistaminic	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. <i>Herbal Medicine - A Guide for Health-care Professionals</i> . The Pharmaceutical Press, London. 296pp.
Antiinflammatory	
Antiischemic	Mills, Simon and Bone, Kerry. 2000. <i>Phytotherapy</i> . Churchill Livingston, Edinburgh.
Antileishmanic 10 ug/ml	
Antilipogenic IC63=10 uM	Mills, Simon and Bone, Kerry. 2000. <i>Phytotherapy</i> . Churchill Livingston, Edinburgh.
Antimalarial 0.14-0.36 ug/ml	
Antimalarial 50 uM	
Antimitotic	Mills, Simon and Bone, Kerry. 2000. <i>Phytotherapy</i> . Churchill Livingston, Edinburgh.
Antimuscarinic	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. <i>Herbal Medicine - A Guide for Health-care Professionals</i> . The Pharmaceutical Press, London. 296pp.
Antimyalgic	
Antimycotic	Mills, Simon and Bone, Kerry. 2000. <i>Phytotherapy</i> . Churchill Livingston, Edinburgh.
Antineoplastic	
Antinephritic	
Antiperistaltic	Bruneton, J. 1999. <i>Pharmacognosy, Phytochemistry, Medicinal Plants</i> . 2nd Ed. Lavoisier Publishing, Paris. 1119 pp.
Antipharyngitic	Pizzorno, J.E. and Murray, M.T. 1985. <i>A Textbook of Natural Medicine</i> . John Bastyr College Publications, Seattle, Washington (Looseleaf).
Antiphotoxidative	
Antiplasmodial IC50=0.14-0.36 ug/ml	
Antipneumonic	Pizzorno, J.E. and Murray, M.T. 1985. <i>A Textbook of Natural Medicine</i> . John Bastyr College Publications, Seattle, Washington (Looseleaf).
Antipyretic 3 x aspirin	
Antisalmonella	
Antisecretory	
Antiseptic 25 ug/ml	
Antishigellic 12.5 ug/ml	Pizzorno, J.E. and Murray, M.T. 1985. <i>A Textbook of Natural Medicine</i> . John Bastyr College Publications, Seattle, Washington (Looseleaf).
Antispasmodic	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, Londón. 791 pp.
Antispermigenic	
Antistaphylococcic	
Antistrep	Pizzorno, J.E. and Murray, M.T. 1985. <i>A Textbook of Natural Medicine</i> . John Bastyr College Publications, Seattle, Washington (Looseleaf).
Antisyphilitic	
Antitrichomitic 0.20%	
Antitrypanosomal	Williamson, E. M. and Evans, F. J., <i>Potter's New Cyclopaedia of Botanical Drugs and Preparations</i> , Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
Antitubercular MIC=25 ug/ml	
Antitumor (brain) IC91=150 ug/ml	Werbach & Murray, 1994.
Antiulcer	
Antivaginitic	Huang, K. C. 1993. <i>The Pharmacology of Chinese Herbs</i> . CRC Press, Boca Raton, FL 388 pp.
Antiviral	Huang, K. C. 1993. <i>The Pharmacology of Chinese Herbs</i> . CRC Press, Boca Raton, FL 388 pp.
Astringent	
Bilirubinolytic	
COX-2-Inhibitor 100 ug/ml	
Calcium-Antagonist	Mills, Simon and Bone, Kerry. 2000. <i>Phytotherapy</i> . Churchill Livingston, Edinburgh.
Candidicide	
Cardiodepressant	Huang, K. C. 1993. <i>The Pharmacology of Chinese Herbs</i> . CRC Press, Boca Raton, FL 388 pp.
Cardiotonic	
Carminative	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. <i>Herbal Medicine - A Guide for Health-care Professionals</i> . The Pharmaceutical Press, London. 296pp.
Cholagogue	
Cholekinetic	
Choleretic	Williamson, E. M. and Evans, F. J., <i>Potter's New Cyclopaedia of Botanical Drugs and Preparations</i> , Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
Collyrium	
Cyclooxygenase-Inhibitor	
Cytotoxic	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, Londón. 791 pp.
Digestive	
Diuretic	
Emetic	
Fungicide 12.5-150 ug/ml	Pizzorno, J.E. and Murray, M.T. 1985. <i>A Textbook of Natural Medicine</i> . John Bastyr College Publications, Seattle, Washington (Looseleaf).
Glaucomagenic	
Hemostat	

Hypocholesterolemic	Ivorra, M.D., Paya, M., and Villar, A. 1989. A Review of Natural Products and Plants as Potential Antidiabetic Drugs. <i>Journal of Ethnopharmacology</i> , 27: 243-275, 1989.
Hypoglycemic	
Hypotensive	
Immunostimulant	
Lachrymatory	Mills, Simon and Bone, Kerry. 2000. <i>Phytotherapy</i> . Churchill Livingston, Edinburgh.
Larvicide 9 ppm	
Leucocytogenic	
Lipase-Inhibitor	Medline (post 1990 searches filed in my computer)
Lipoxygenase-Inhibitor IC50=118 uM	
Mutagenic	
Mycobactericide MIC=25-50 ug/ml	
Mydriatic	Mills, Simon and Bone, Kerry. 2000. <i>Phytotherapy</i> . Churchill Livingston, Edinburgh.
Myocardiodepressant	
Myorelaxant	
Pesticide	
Phototoxic 9 ppm	
Plasmodicide IC50=0.14-0.36 ug/ml	
Prostaglandin-Synthesis-Inhibitor 25 mg/kg ivn rbt	Huang, C. G., Chu, Z. L., Yang, Z. M. 1991. Effect of Berberine on Synthesis of Platelet TXA2 and Plasma PGI2 in Rabbits. <i>Chung-Kuo Yao Li Hsueh Pao</i> , 12(6): 526-528.
Protisticide IC50=0.14-0.36 ug/ml	
RNA-Depressant	
RT-Inhibitor	
Respiradepressant	Martindale's 28th
Sedative	
Stomachic	
Topoisomerase-II-Inhibitor 2.5 uM	Kobayashi, Y., Yamashita, Y., Fujii, N., Takaboshi, K., Kawakami, T., Kawamura, M., Mizukami, T., Nakano, H. 1995. Inhibitors of DNA Topoisomerase I and II Isolated From the <i>Coptis</i> Rhizomes. <i>Planta Medica</i> , 61: 414-418.
Trichomonicide	Martindale's 29th
Trypanocide	
Uterocontractant	
Uterotonic	Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
Vagostimulant man	
Vasoconstrictor	
Vasodilator 2 mg/kg cat	
Vermifuge	
Vibrioefuge	

BETA-SITOSTEROL

Bark	--	--	*
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Activities (47)

Androgenic	
Angiogenic	
Anorexic	Martindale's 28th
Antiadenomic	Merck 11th Edition
Antiandrogenic	Malini, T. and Vanithakumari, G. 1989. Rat Toxicity Studies With B-Sitosterol. <i>Journal of Ethnopharmacology</i> , 28: 221-234, 1990.
Antibacterial	Recently became Internat. J. Crude Drug Res. 28(1,2,3,4):1990, page 155.
Anticancer (Breast)	Madhavi, D. L., Bomser, J., Smith, M., Singletary, K. 1998. Isolation of Bioactive Constituents from <i>Vaccinium myrtillus</i> (Bilberry) Fruits and Cell Cultures. <i>Plant Sci.</i> , 131(1): 95-103.
Anticancer (Cervix)	
Anticancer (Lung)	
Antiedemic IC54=320 mg/kg orl	
Antiestrogenic	Malini, T. and Vanithakumari, G. 1989. Rat Toxicity Studies With B-Sitosterol. <i>Journal of Ethnopharmacology</i> , 28: 221-234, 1990.
Antifeedant	Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.
Antifertility	Malini, T. and Vanithakumari, G. 1989. Rat Toxicity Studies With B-Sitosterol. <i>Journal of Ethnopharmacology</i> , 28: 221-234, 1990.
Antigonadotrophic	Malini, T. and Vanithakumari, G. 1989. Rat Toxicity Studies With B-Sitosterol. <i>Journal of Ethnopharmacology</i> , 28: 221-234, 1990.
Antihyperlipoproteinemia	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.
Antiinflammatory	
Antileukemic	
Antilymphomeric	
Antimutagenic 250 ug/ml	
Antiphidic 2.3 mg mus	Economic & Medicinal Plant Research, 5: 363.
Antioxidant IC44=10 uM	
Antiprogestational	Malini, T. and Vanithakumari, G. 1989. Rat Toxicity Studies With B-Sitosterol. <i>Journal of Ethnopharmacology</i> , 28: 221-234, 1990.
Antiprostaglandin 30 mg/day/12 wks	
Antiprostatadenomic	Merck 11th Edition
Antiprostatic 10-20 mg 3 x/day/orl man	
Antipyretic	Neuwinger, H. D. 1996. <i>African Ethnobotany - Poisons and Drugs</i> . Chapman & Hall, New York. 941 pp.
Antitumor (Breast)	Madhavi, D. L., Bomser, J., Smith, M., Singletary, K. 1998. Isolation of Bioactive Constituents from <i>Vaccinium myrtillus</i> (Bilberry) Fruits and Cell Cultures. <i>Plant Sci.</i> , 131(1): 95-103.
Antitumor (Cervix)	
Antitumor (Lung)	
Antiviral	Abid Ali Khan, M.M., Jain, D.C., Bhakuni, R.S., Zaim, M., and Thakur, R.S. 1991. Occurrence of some antiviral sterols in <i>Artemisia annua</i> . <i>Plant Science</i> , 75: 161-165, 1991.
Apoptotic	
Artemicide LC50=110 ppm	Jung, J.H., Pummangura, S., Chaichantipyuth, C., Patarapanich, C., and McLaughlin, J.L. 1989. Bioactive Constituents of <i>Melodorum fruticosum</i> . <i>Phytochemistry</i> , 29(5): 1667-1670. 1990.
Cancer-Preventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.
Candidicide	Recently became Internat. J. Crude Drug Res. 28(1,2,3,4):1990, page 155.
Caspase-8-Inducer	
Estrogenic	
Febrifuge	Neuwinger, H. D. 1996. <i>African Ethnobotany - Poisons and Drugs</i> . Chapman & Hall, New York. 941 pp.
Gonadotrophic	Malini, T. and Vanithakumari, G. 1989. Rat Toxicity Studies With B-Sitosterol. <i>Journal of Ethnopharmacology</i> , 28: 221-234, 1990.
Hepatoprotective	
Hypocholesterolemic 2-6 g/man/day/orl	Martindale's 30th
Hypocholesterolemic 9-3,330 mg/man/day/orl	Martindale's 28th
Hypoglycemic	Ivorra, M.D., Paya, M., and Villar, A. 1989. A Review of Natural Products and Plants as Potential Antidiabetic Drugs. <i>Journal of Ethnopharmacology</i> , 27: 243-275, 1989.
Hypolipidemic 2-6 g/day	
Pesticide	
Spermicide	Malini, T. and Vanithakumari, G. 1989. Rat Toxicity Studies With B-Sitosterol. <i>Journal of Ethnopharmacology</i> , 28: 221-234, 1990.
Ubiquitin	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.
Ulcerogenic 500 mg/kg ipr rat	

CALCIUM

Bark -- 14100.0 -0.44 *

Activities (28)

AntiPMS 1 g/day					
Antiallergic 500 mg/day	Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp.				
Antianxiety					
Antiarrhythmic 500-1,500 mg					
Antiarthritic 1,000 mg/day					
Antiatherosclerotic 500 mg/day	Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp.				
Anticlimacteric 1,000-1,500 mg/day					
Antidepressant	Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp.				
Antidote (Aluminum)	Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp.				
Antidote (Lead)	Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp.				
Antihyperkinetic	Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp.				
Antihypertensive	Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp.				
Antiinsomniac	Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp.				
Antimenopausal 1,000-1,500 mg/day					
Antiobesity					
Antiosteoporotic 500-2,000 mg/day					
Antiperiodontitic 750 mg/day	Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp.				
Antirheumatic 1,000 mg/day					
Antistress 500-1,500 mg/day					
Antitic	Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp.				
Anxiolytic 500-1,500 mg/day					
Calcium-Channel-Blocker					
Diuretic					
Hypocholesterolemic 500 mg/day	Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp.				
Hypotensive 1 g/day	Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp.				
Laxative 1,000-1,200 mg					
Tranquilizer 500-1,500 mg/day					
Vasodilator					

CAMPESTEROL

Bark -- -- *

Activities (2)

Antioxidant IC37=10 uM	
Hypocholesterolemic	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.

CANDICINE

Bark -- -- *

Activities (4)

Curare	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Epileptogenic	
Hypertensive	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Nicotinic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

COPPER

Bark -- 6.0 -0.53 *

Activities (12)

Antianemic	
Antiarthritic	
Antidiabetic 2-4 mg/day	Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp.
Antifatigue	
Antiinflammatory	Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp.
Antinociceptive	Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp.
Antiosteoporotic	
Cardioprotective	
Contraceptive	Martindale's 28th
Hypocholesterolemic	Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp.
Immunomodulator	
Schizophrenogenic	Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp.

DIHYDROPHELLOSIDE

Fruit -- -- *

EO

Fruit -- -- *

FAT

Cr -- 517000.0 *

FAT	Plant	--	517000.0	6.79	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
FLAVONOIDS	Fruit	--	100000.0	1.73	*
GUANIDINE	Bark	--	--	--	*
Activities (6)					
Antimyasthenic 10-35 mg/kg/day Convulsant Hepatotoxic Hypertensive Hypoglycemic Myostimulant					
Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.					
HYPERIN	Fruit	--	--	--	*
Activities (14)					
Aldose-Reductase-Inhibitor	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.				
Antibacterial					
Antiinflammatory					
Antiischemic					
Antioxidant					
Antiradicular					
Antitussive					
Antiviral					
Capillarifortificant	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.				
Capillarigenic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.				
Diuretic					
Hepatoprotective IC80=30 ug/ml	Mayumi Ito (nee Someya), et al. 1990. Hepatoprotective Compounds from Canarium album and Euphorbia nematocypha. Chem. Pharm. Bull. 38(8): 2201-2203, 1990.				
Hypotensive					
Pesticide					
IRON	Bark	--	210.0	0.04	*
Activities (6)					
Antiakathistic	Martindale's 29th				
Antianemic	Martindale's 29th				
Anticanker					
Anticheilitic	Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp.				
Antimenorrhagic 100 mg/day/wmn/orl	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).				
Prooxidant					
JATRORRHIZINE	Bark	--	--	--	*
Activities (13)					
Antiinflammatory					
Antimalarial IC50=0.42-1.61 ug/ml					
Antiphotoxidative					
Antiplasmodial IC50=0.42-1.61 ug/ml					
CNS-Depressant					
CNS-Stimulant					
Enterotonic					
Fungicide	Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.				
Hypotensive	Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.				
Pesticide					
Protisticide IC50=0.42-1.61 ug/ml					
Sedative	Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.				
Uterocontractant	Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livingston, Edinburgh.				

Activities (13)

Antiinflammatory

Antimalarial IC₅₀=0.42-1.61 ug/ml

Antiphotooxidative

Antiplasmodial IC₅₀=0.42-1.61 ug/ml

CNS-Depressant

CNS-Stimulant

Enterotonic

Fungicide

Williamson, E. M. and Evans, F. J., *Potter's New Cyclopaedia of Botanical Drugs and Preparations*, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.

Hypotensive

Williamson, E. M. and Evans, F. J., *Potter's New Cyclopaedia of Botanical Drugs and Preparations*, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.

Pesticide

Protisticide IC₅₀=0.42-1.61 ug/mlWilliamson, E. M. and Evans, F. J., *Potter's New Cyclopaedia of Botanical Drugs and Preparations*, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.

Sedative

Mills, Simon and Bone, Kerry. 2000. *Phytotherapy*. Churchill Livingston, Edinburgh.

Uterocontractant

Mills, Simon and Bone, Kerry. 2000. *Phytotherapy*. Churchill Livingston, Edinburgh.**LIMONIN****Plant**

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Activities (5)

Anticataleptic

Jacobson, M., *Glossary of Plant-Derived Insect Deterrents*, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.Antifeedant
IC₅₀=>10 ug/ml

Life Sciences 55: 1061.

Antileukemic
IC₅₀=>100 ug/mlKhalid, S.A., Farouk, A., Geary**, T.G., and Jensen, J.B. 1985. Potential Antimalarial Candidates From African Plants: An In Vitro Approach Using *Plasmodium falciparum**. *Journal of Ethnopharmacology*, 15: 201-209, 1986.

Pesticide

MAGNESIUM**Bark**

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650.0

-0.75

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Activities (65)

AntiCFS

AntiLyme 400-1,000 mg

AntiMS

AntiPMS 400-800
mg/day/wmn/orlAntiPMS 400-800
mg/day/wmn orlAntiRaynaud's 280-350
mg/day

Antiaggregant 400 mg/day

Antialcoholic

Antianginal 400 mg/day

Werbach, M. 1993. *Healing with Food*. Harper Collins, New York, 443 pp.

Antianorectic

Davies, S., and Stewart, A. 1990. *Nutritional Medicine*. Avon Books, New York. 509pp.

Antianxiety 400 mg/day

Werbach, M. 1993. *Healing with Food*. Harper Collins, New York, 443 pp.

Antiarrhythmic 400 mg/day

Davies, S., and Stewart, A. 1990. *Nutritional Medicine*. Avon Books, New York. 509pp.

Antiarthritic

Pizzorno, J.E. and Murray, M.T. 1985. *A Textbook of Natural Medicine*. John Bastyr College Publications, Seattle, Washington (Looseleaf).

Antiasthmatic

Antiatherosclerotic 400
mg/dayDavies, S., and Stewart, A. 1990. *Nutritional Medicine*. Avon Books, New York. 509pp.

Anticephalagic

Anticlimacteric 500-750
mg/dayFacciola, S. 1998. *Cornucopia - A Source Book of Edible Plants*. Kampong Publications, Vista CA. 713 pp.

Anticonvulsant

Anticorony 400 mg/day

Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. *Syndrome X - The complete nutritional program to prevent and reverse insulin resistance*. John Wiley & Sons, New York. 272 pp. \$24.95

Antidepressant

Antidiabetic 400-800
mg/man/dayDavies, S., and Stewart, A. 1990. *Nutritional Medicine*. Avon Books, New York. 509pp.Antidysmenorrheic 100 mg 4
x/dayWerbach, M. 1993. *Healing with Food*. Harper Collins, New York, 443 pp.Antiedometriotic 500
mg/day

Antienterotic

Antiepileptic 450 mg/day

Antifatigue

Antifibromyalgic 200-300 mg
3x/day

Antigastric

Antiglaucomic

Antihyperkinetic	Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp.
Antihypertensive	Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp.
Antihypoglycemic	Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp.
Antiinflammatory 100 mg 4 x/day	Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp.
Antiinsomniac	Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp.
Antilithic	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).
Antimastalgic	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).
Antimenopausal 500-750 mg/day	
Antimigraine 200 mg/day/man	Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp.
Antimiral-valve-prolapse	
Antinephrolytic	
Antineurotic	Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp.
Antiosteoporotic 500-1,000 mg/day/wmn/orl	
Antiplaque 500-1,000 mg/day	
Antiretinopathic 400 mg/day	Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. Syndrome X - The complete nutritional program to prevent and reserve insulin resistance. John Wiley & Sons, New York. 272 pp. \$24.95
Antispasmodic	
Antispasmophilic 500 mg/day	Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp.
Antistress 500-750 mg/day	
Antistroke 400 mg/day	Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. Syndrome X - The complete nutritional program to prevent and reserve insulin resistance. John Wiley & Sons, New York. 272 pp. \$24.95
Antisyndrome-X 400 mg/man/day	Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. Syndrome X - The complete nutritional program to prevent and reserve insulin resistance. John Wiley & Sons, New York. 272 pp. \$24.95
Anxiolytic 500-750 mg/day	
CNS-Depressant	Facciola, S. 1998. Cornucopia - A Source Book of Edible Plants. Kampong Publications, Vista CA. 713 pp.
Calcium-Antagonist	
Cardioprotective	
Diuretic	
Hypocholesterolemic 400 mg/day	Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp.
Hypotensive 260-500 mg/day	
Immunomodulator	
Insulinogenic 400 mg/day	Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. Syndrome X - The complete nutritional program to prevent and reserve insulin resistance. John Wiley & Sons, New York. 272 pp. \$24.95
Laxative 300-500 mg/day	
Litholytic	
Myorelaxant 100 mg 4 x/day	Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp.
Neurotransmitter	
Tranquilizer 500-750 mg/day	
Uterorelaxant 100 mg 4 x/day	Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp.
Vasodilator	

MAGNOFLORINE

Bark -- -- *

Activities (11)

Antibacterial	
Antineuromuscular ED50=10 mg/kg	
Antispasmodic	Huang, K. C. 1993. The Pharmacology of Chinese Herbs. CRC Press, Boca Raton, FL 388 pp.
CNS-Depressant	Huang, K. C. 1993. The Pharmacology of Chinese Herbs. CRC Press, Boca Raton, FL 388 pp.
Curaroid <1% tubocurarine	Neuwinger, H. D. 1996. African Ethnobotany - Poisons and Drugs. Chapman & Hall, New York. 941 pp.
Hypotensive	
PAF-Inhibitor	
Paralytic	Neuwinger, H. D. 1996. African Ethnobotany - Poisons and Drugs. Chapman & Hall, New York. 941 pp.
Pesticide	
Toxic	Neuwinger, H. D. 1996. African Ethnobotany - Poisons and Drugs. Chapman & Hall, New York. 941 pp.
Vasodilator	Huang, K. C. 1993. The Pharmacology of Chinese Herbs. CRC Press, Boca Raton, FL 388 pp.

MANGANESE

Bark -- 20.0 -0.54 *

Activities (14)

AntiPMS	
Antialcoholic	Forest H. Nielsen, USDA, Grand Forks, various publications.
Antianemic	Martindale's 28th
Antiarthritic	
Antidiabetic 3-5 mg/day	Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp.
Antidiabetic 10-30 mg/man/day	
Antidiscotic	Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp.
Antidyskinetic	Martindale's 28th
Antiepileptic 450 mg/day	Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp.
Antiosteoporotic	
Antitotic	Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp.
Antioxidant	
Antisyndrome-X 10-30 mg/man/day	Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. Syndrome X - The complete nutritional program to prevent and reverse insulin resistance. John Wiley & Sons, New York. 272 pp. \$24.95
Hypoglycemic 10-30 mg/man/day	

MENisperine

Bark -- -- *

Activities (2)

Antineuromuscular	
Hypotensive	

METHYL-N-HEPTYL-KETONE

Fruit -- -- *

METHYL-N-NONYL-KETONE

Fruit -- -- *

MYRCENE

Fruit -- -- *

Activities (22)

ACE-Inhibitor 100 ug/ml	
Aldose-Reductase-Inhibitor 100 ug/ml	Okamura, K., Iwakami, S., Matsunaga, T. 1992. Biological Activity of Monoterpenes from Trees. Toyama-Ken Yakuji Kenkyusho Nenpo, (20): 95-101.
Allergenic	
Analgesic	Kauderer, B., Zamith, H., Paumgartten, F.J.R., and Speit, G. Evaluation of the Mutagenicity of B-Myrcene in Mammalian Cells In Vitro. Environmental and Molecular Mutagenesis 18: 28-34, 1991.
Antibacterial	
Anticonvulsant	
Antimutagenic	Kauderer, B., Zamith, H., Paumgartten, F.J.R., and Speit, G. Evaluation of the Mutagenicity of B-Myrcene in Mammalian Cells In Vitro. Environmental and Molecular Mutagenesis 18: 28-34, 1991.
Antinitrosaminic	
Antinociceptive 10-20 mg/kg ipr mus	Rao, V.S.N., Menezes, A.M.S., Viana, G.S.B. 1990. Effect of myrcene on nociception in mice. J. Pharm. Pharmacol. 42: 877-878, 1990.
Antinociceptive 20-40 mg/kg scu mus	Rao, V.S.N., Menezes, A.M.S., Viana, G.S.B. 1990. Effect of myrcene on nociception in mice. J. Pharm. Pharmacol. 42: 877-878, 1990.
Antioxidant	Jim Duke's personal files.
Antispasmodic	Jim Duke's personal files.
Chemopreventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.
FLavor FEMA 0.5-9	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Fungicide	Keeler, R.F. and Tu, A.T. eds. 1991. Toxicology of Plant and Fungal Compounds. (Handbook of Natural Toxins Vol. 6) Marcel Dekker, Inc. NY. 665 pp.
Hypothermic	
Insectifuge	
Irritant	Zeebovitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. Compendium of Safety Data Sheets for Research and Industrial Chemicals. VCH Publishers, New York. 3560-4253.
Myorelaxant 100-200 mg/kg	
P450-2B1-Inhibitor IC50=0.14 uM	
Perfumery	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Pesticide	

NOR-ICARISID(8-(3-BETA-GLUCOSIDE-OXYISOPENTYL)-KAEMPFEROL

Plant -- -- *

OBACULACTONE

Bark -- -- *

OBACUNONE

Bark -- -- *

Activities (3)

Anticataleptic
Antifeedant
Pesticide

Jacobson, M., *Glossary of Plant-Derived Insect Deterrents*, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.

PALMATINE

Bark -- -- *

Activities (17)

Abortifacient
Adrenocorticotropic
Analgesic
Antialzheimeran?
Antiarrhythmic
Antibacterial
Anticholinesterase
Antiinfarctal
Antiinflammatory
Antimalarial
Antipyretic
CNS-Depressant
Hypotensive
Inotropic
Pesticide
Respiradepressant
Uterotonic

Williamson, E. M. and Evans, F. J., *Potter's New Cyclopaedia of Botanical Drugs and Preparations*, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.

Williamson, E. M. and Evans, F. J., *Potter's New Cyclopaedia of Botanical Drugs and Preparations*, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.

Grenand, P., Moretti, C., and Jacquemin, H. 1987. *Pharmacopees Traditionnelles en Guyane*. l'ORSTROM, Paris. 569 pp.

Williamson, E. M. and Evans, F. J., *Potter's New Cyclopaedia of Botanical Drugs and Preparations*, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.

Williamson, E. M. and Evans, F. J., *Potter's New Cyclopaedia of Botanical Drugs and Preparations*, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.

PHELLAMURETIN

Leaf -- -- *

PHELLAMURINE

Leaf -- -- *

PHELLATINE

Leaf -- -- *

PHELLAVINE

Leaf -- -- *

PHELLODENDRINE

Bark -- -- *

PHELLODENDROSIDE

Plant -- -- *

PHELLOSIDE

Fruit -- -- *

POTASSIUM

Bark -- 4370.0 -0.35 *

Activities (14)

Angiotensin-Receptor-Blocker
Antiarrhythmic
Antidepressant
Antifatigue
Antihypertensive
Antispasmodic
Antistroke
Anxiolytic
Beta-Blocker
Cardioprotective 3,000-5,000 mg
Cardiotoxic 18,000 mg/man/day
Diuretic
Hypotensive
Vasodilator

Davies, S., and Stewart, A. 1990. *Nutritional Medicine*. Avon Books, New York. 509pp.

Davies, S., and Stewart, A. 1990. *Nutritional Medicine*. Avon Books, New York. 509pp.

Davies, S., and Stewart, A. 1990. *Nutritional Medicine*. Avon Books, New York. 509pp.

Davies, S., and Stewart, A. 1990. *Nutritional Medicine*. Avon Books, New York. 509pp.

PROTEIN

Seed -- 358000.0 1.1 *

SODIUM

Bark -- 55.0 -0.46 *

Activities (1)

Hypotensive Davies, S., and Stewart, A. 1990. *Nutritional Medicine*. Avon Books, New York. 509pp.

ZINC

Bark -- 26.0 1.27 *

Activities (77)

ACE-Inhibitor	
Analgesic	
AntiBPH 25-60 mg/day	Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp.
AntiCrohn's	
AntiHIV	
Antiacne 135 mg/day	
Antiacrodermatitic 8-34 mg/day/orl/chd	Martindale's 29th
Antialcoholic	
Antialopecic	Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp.
Antialzheimeran 50 mg/day	Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp.
Antiangiogenic	
Antianorexic	Martindale's 29th
Antiarthritic 50 mg/3x/day/orl/man	
Anticanker 100 mg/day	Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp.
Anticataract 30 mg/day	Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp.
Anticoeliac	Martindale's 28th
Anticold 50 mg	Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp.
Anticolitic	Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp.
Anticoronal 30 mg/day	Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. Syndrome X - The complete nutritional program to prevent and reserve insulin resistance. John Wiley & Sons, New York. 272 pp. \$24.95
Antidandruff	Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp.
Antidementia	
Antidiabetic 30 mg/day	Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. Syndrome X - The complete nutritional program to prevent and reserve insulin resistance. John Wiley & Sons, New York. 272 pp. \$24.95
Antidote (Cadmium)	Let's Live, May 1989.
Antidisgeuzic	
Antieczemic 150 mg/day	Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp.
Antiencephalopathic	Martindale's 29th
Antiepileptic 100 mg/day	Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp.
Antifibrotic 30 mg	
Antifuruncular 45 mg/3x/day/man	Martindale's 28th
Antihangover 15 mg	
Antitherapeutic? 25-60 mg/day	
Antiimpotence	Martindale's 29th
Antiinfective 50 mg/day	Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp.
Antiinfertility 60 mg/day	Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp.
Antiinsomniac	Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp.
Antileptic	Martindale's 29th
Antileukonychic	
Antilymphomeric	
Antimaculitic	
Antimetastatic	
Antineuropathic	
Antinyctalopic	
Antiobesity 30 mg/day	Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. Syndrome X - The complete nutritional program to prevent and reserve insulin resistance. John Wiley & Sons, New York. 272 pp. \$24.95
Antiosteoporotic	
Antiperiodontic	
Antiplaque	Martindale's 29th
Antiprolactin	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).
Antiprostatic 50 mg/man/day/orl	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).
Antirheumatic	Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp.
Antiseptic 50 mg/day	Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp.
Antispare-Tire 30 mg/day	Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. Syndrome X - The complete nutritional program to prevent and reserve insulin resistance. John Wiley & Sons, New York. 272 pp. \$24.95
Antistomatitic 50 mg/man/3x/day	Martindale's 28th
Antisynrome-X 30 mg/day	Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. Syndrome X - The complete nutritional program to prevent and reserve insulin resistance. John Wiley & Sons, New York. 272 pp. \$24.95
Antitinnitin 60-120 mg/day	Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp.
Antitriglyceride 30 mg/day	Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. Syndrome X - The complete nutritional program to prevent and reserve insulin resistance. John Wiley & Sons, New York. 272 pp. \$24.95
Antiulcer 50 mg/3x/day/man	Martindale's 28th
Antiulcer 88 mg/rat/day/15 days	
Antiviral?	Martindale's 29th
Astringent	Martindale's 28th
Collagenic	

Copper-Antagonist	Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. <i>Syndrome X - The complete nutritional program to prevent and reserve insulin resistance</i> . John Wiley & Sons, New York. 272 pp. \$24.95
Deodorant	Martindale's 29th
Detoxicant (Alcohol)	
Ergogenic	
Hypotensive 30 mg/day	Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. <i>Syndrome X - The complete nutritional program to prevent and reserve insulin resistance</i> . John Wiley & Sons, New York. 272 pp. \$24.95
Immunomodulator	
Immunostimulant	Davies, S., and Stewart, A. 1990. <i>Nutritional Medicine</i> . Avon Books, New York. 509pp.
Immunosuppressant 300 mg/day/6 wks/orl/man	Martindale's 29th
Insulinogenic 30 mg/day	Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. <i>Syndrome X - The complete nutritional program to prevent and reserve insulin resistance</i> . John Wiley & Sons, New York. 272 pp. \$24.95
Leptogenic 30-60 mg/man/day	Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. <i>Syndrome X - The complete nutritional program to prevent and reserve insulin resistance</i> . John Wiley & Sons, New York. 272 pp. \$24.95
Mucogenic	Li, K.M. Effect of zinc sulphate on acetic acid-induced gastric ulceration in rats. <i>J. Pharm. Pharmacol.</i> 42: 657-659, 1990.
NF-kB-Inhibitor	
Pesticide	
Spermigenic 60 mg/day	Werbach, M. 1993. <i>Healing with Food</i> . Harper Collins, New York, 443 pp.
Testosteronogenic 60 mg/day	Werbach, M. 1993. <i>Healing with Food</i> . Harper Collins, New York, 443 pp.
Trichomonicide	Martindale's 29th
Vulnerary	Martindale's 28th